

CLAIMS:

1. A transflective liquid crystal display device, having a plurality of pixels, each comprising a liquid crystal layer being sandwiched between a front and a back substrate, a back light, a semi-transparent reflective element, being arranged between the back substrate and the back light, a front polariser, and a driving arrangement for controlling optical
5 properties of the liquid crystal layer, whereby the pixel is subdivided into a reflective pixel part and a transmissive pixel part,
c h a r a c t e r i s e d in that
- a cholesteric layer composition is arranged between said liquid crystal layer and the back substrate, said cholesteric layer composition comprising;
 - 10 - in said reflective pixel part, a first cholesteric layer composition part for reflecting a desired primary pixel colour, and
 - in said transmissive pixel part a second cholesteric layer composition part for reflecting the remaining primary colours, other than said desired primary pixel colour.
- 15 2. A transflective liquid crystal display device according to claim 1, wherein the second cholesteric layer composition part comprises a first and a second layer, wherein said first layer is arranged to reflect light of a first remaining primary colour and said second layer is arranged to reflect light of a second remaining primary colour.
- 20 3. A transflective liquid crystal display device according to claim 1 or 2, wherein the pixel further comprises an absorbing colour filter arranged between said liquid crystal layer and said cholesteric colour filter composition, said absorbing colour filter being arranged to absorb the remaining primary colours, transmitting only a desired primary pixel colour.
- 25 4. A transflective liquid crystal display device as in any one of the preceding claims, wherein said pixel further comprises a in-cell quarterwave retarder plate and an in-cell polariser, both being arranged between the liquid crystal layer 2 and the cholesteric layer

composition.

5. A transflective liquid crystal display device as in any one of the preceding claims, wherein an absorbing layer is arranged in the reflective pixel part, between the first
5 cholesteric layer composition part and the back substrate.
6. A transflective liquid crystal display device according to claim 5, wherein a mirror element is arranged between the absorbing layer and the back substrate.
- 10 7. A transflective liquid crystal display device as in any one of the preceding claims, wherein said liquid crystal layer is arranged to act as a retarding $\lambda/2$ plate.
8. A transflective liquid crystal display device as in any one of the preceding claims, wherein the semi-transparent reflective element is constituted by a reflective circular
15 polariser.
9. A transflective liquid crystal display device as in any one of the preceding claims, wherein said driving arrangement is one of an active matrix driving arrangement or a passive matrix driving arrangement.
- 20 10. A transflective liquid crystal display device as in any one of the preceding claims, wherein said first and second cholesteric layer composition parts occupy essentially the same cell gap.
- 25